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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,024	11/18/2003	Hideo Mae	1009683-000487	3316

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EXAMINER

CHENEY, BOBAE K.

ART UNIT	PAPER NUMBER
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2458

NOTIFICATION DATE	DELIVERY MODE
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08/06/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/715,024	Applicant(s) MAE ET AL.	
	Examiner BOBAE K. CHENEY	Art Unit 2458	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 11/106,099.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 16, 17, 18, 23, 24, and 25 are amended by applicant.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 16 – 19** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. **Claims 16 - 19** recite a computer-readable medium. It can be reasonably interpreted that the computer-readable medium would include embodiments including propagation media, such as carrier waves, which fail to establish a statutory category of invention. Amending the specification as well as the claim to recite "a non-transitory computer-readable medium" is believed to be sufficient to overcome this rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 16 – 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi (JP 2000-29648) in view of Yasushi (JP 11-220609) and Albanese (US Patent 5,617,541).

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7. Regarding to **claim 16**, “A computer-readable medium having stored thereon a data communication program for causing a computer to execute: a confirmation step of confirming reception of electronic mail attached with one of a plurality of firmware,” Takashi teaches performing e-mail reception and check whether there is any e-mail addressed to printer [Paragraph 16]. The e-mail comprises data, which is changed into program execution form (firmware). In order to check E-mail address, the system needs to confirm the reception of the e-mail first. “A permission step of permitting writing of said one firmware into a predetermined memory,” Takashi teaches changing received data into program execution form (writing) [Paragraph 16]. Takashi does not teach acquirement step, determination step, permission step, or priority level. However, Yasushi and Albanese teach them. “An acquirement step of acquiring information relating to said priority level of said attached one firmware from said electronic mail,” Yasushi teaches dividing large data into plurality of data [Paragraph 31, 38]. “A determination step of determining whether said attached one firmware attains a write allowable state into a predetermined memory based on said acquired information relating to a priority level,” Yasushi teaches combining data of each file, which means the system determined the files are allowed to be written [Paragraph 31, 38]. “When it is determined the firmware attached attains a write allowable state by said determination step,” Yasushi teaches combining data of each file [Paragraph 31, 38]. It would have been obvious to one of ordinary skill in the art at the time of the invention to split large file taught by Yasushi when sending firmware through e-mail taught by Takashi for the purpose of faster transaction of firmware. Large file would take longer to

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transfer, but smaller file is faster to transfer. Also, e-mail has limited size of file it can transfer at one time. Takashi and Yasushi do not expressly teach "each firmware having a memory write priority level set." However, Albanese teaches data having priority levels [Column 2 Line 58 – Column 3 Line 6]. It would have been obvious to one of ordinary skill in the art at the time of the invention to have priority level set taught by Albanese in divided files transferred taught by Yasushi for the purpose of processing the most critical data first. For example, if data A needs to be processed in order to process data B, A should be processed first. By adding priority level in the data, it would reduce the time for processing the data.

8. Regarding to **claim 17**, "further causes the computer to execute a write step of writing said one firmware into a predetermined memory when writing is permitted by said permission step," Takashi teaches changing received data into program execution form (writing) [Paragraph 16].

9. Regarding to **claim 18**, "wherein said determination step determines a write allowable state when the priority level of said attached one firmware is highest among firmware not written into a memory out of said plurality of firmware," Albanese teaches processing the data having highest priority first [Column 8 Line 55 – Column 9 Line 7].

10. **Claim 19** is similar to claim 16. Therefore, claim 19 is rejected under the similar ground.

11. **Claims 20 and 22** are similar to claim 16. Therefore, claim 20 is rejected under the similar ground.

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12. **Claim 21** is similar to claim 17. Therefore, claim 21 is rejected under the similar ground.

13. **Claim 23** is similar to combination of claims claim 16 and 17. Therefore, claim 23 is rejected under the similar ground.

14. Regarding to **claim 24**, "wherein said plurality of firmware correspond to division of firmware for one module into a plurality of parts, and the priority level corresponds to an order of division," Albanese teaches storing (module) priority data [Column 2 Line 58 – Column 3 Line 6].

15. **Claim 25** is rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi, Yasushi, and Albanese as applied to claim 23 above, and further in view of Felouzis (US Patent 5,943,673).

16. Regarding to **claim 25**, Takashi and Yasushi teaches plurality of firmware, but does not expressly teach "wherein said plurality of firmware are respective firmware for a plurality of modules." However, Felouzis teaches downloading firmware to a plurality of modules [Column 2 Line 18 – 24]. It would have been obvious to one of ordinary skill in the art at the time of the invention to send plurality of firmware taught by Takashi and Yasushi to plurality of modules taught by Felouzis for the purpose of quickly recover firmware if one of the firmware in a module fails.

Response to Arguments

17. Applicant's arguments, see page 6, filed 05/18/2010, with respect to 101 have been fully considered and are persuasive. The 101 rejection of claims 23 - 25 have been withdrawn. The 101 rejection of claims 16 – 19 for program per se have been

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withdrawn. However, new 101 rejection regarding to computer-readable medium have been made.

18. Applicant's arguments filed 05/18/2010 have been fully considered but they are not persuasive.

19. Regarding to claim 16 (see pages 7 -10), applicant argues that Albanese does not teach acquiring information relating to a priority level or determining if a firmware should attain a write allowable state based on the acquired information relating to a priority level. However, these limitations are taught by Yasushi. Yasushi teaches combining data of each file, which means the system determined the files are allowed to be written [Paragraph 31, 38]. Yasushi teaches combining data of each file [Paragraph 31, 38]. It would have been obvious to one of ordinary skill in the art at the time of the invention to have priority level set taught by Albanese in divided files transferred taught by Yasushi for the purpose of processing the most critical data first. For example, if data A needs to be processed in order to process data B, A should be processed first. By adding priority level in the data, it would reduce the time for processing the data. Applicant also argues that Takashi, Yasushi, and Albanese do not teach that the claimed invention does NOT wait for the entire firmware to be received prior to writing a part to memory, it only requires that the rewrite order is maintained. However, the claim 16 does not limit to writing the divided firmware into memory without delaying the writing operation. Therefore rejection of claim 16 over Takashi, Yasushi, and Albanese remains as above.

Conclusion

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBAE K. CHENEY whose telephone number is (571)270-7641. The examiner can normally be reached on Monday - Thursday 7:30 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Avellino can be reached on (571)272-3905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BOBAE K CHENEY
Examiner
Art Unit 2458

/BC/
Examiner, Art Unit 2458

/Joseph E. Avellino/
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